CONTENTS

Volume 25, Issue Nos 1-12 (1996)

EARTHQUAKE ENGINEERING AND STRUCTURAL DYNAMICS Issue No. 1, JANUARY

Envelope of Green's Function for Structural Response with Slightly Detuned Vibration Absorbers: H. C. Tsai	1
Application of Boundary Element Analysis for Multiple Seismic Cracking in Concrete Gravity Dams: V. Batta and O. A. Pekau	15
The N2 Method for the Seismic Damage Analysis of RC Buildings: P. Fajfar and P. Gašperšič	31
Locally Generated Surface Waves in Santa Clara Valley: Analysis of Observations and Numerical Simulation: D. Pei and A. S. Papageorgiou	47
Experimental Study of FPS System in Bridge Seismic Isolation: P. Tsopelas, M. C. Constantinou, Y. S. Kim and S. Okamoto	65
An Investigation into the Base Sliding Response of Rigid Concrete Gravity Dams to Dynamic Loading: R. A. Mir and C. A. Taylor	79
A Coherency Model for Spatially Varying Ground Motions: A. Der Kiureghian	99
BOOKS RECEIVED	113
CONFERENCE DIARY	115
Issue No. 2, FEBRUARY	
Modelling Unknown Structural Systems Through the Use of Neural Networks: A. G. Chassiakos and S. F. Masri	117
Testing of Energy Dissipating Cladding Connections: JP. Pinelli, C. Moor, J. I. Craig and B. J. Goodno	129
An Analysis of the Seismic Characteristics of Steel-jacketed Circular Bridge Columns: Y. H. Chai	149
Estimating Modal Parameters for a Simple Soft–soil Site Having a Linear Distribution of Shear Wave Velocity with Depth: J. X. Zhao	163
Experimental Verification of Bounded-force Control Method: B. Indrawan, T. Kokor, M. Sakamoto, N. Koshika and S. Ohrui	179

Indexed or abstracted by 'Abstract Jnl. in Earthquake Eng.', 'Applied Mechanics Reviews', 'Applied Science and Technology Index', 'American Geological Institute', 'Cambridge Scientific Abstracts', 'CITIS—Civil Engineering Abstracts', 'CC/'Eng, Tech & Applied Sciences', 'Engineering Index', 'Environment Abstracts (EIC)', 'Geodex', 'Geological Abstracts', 'Geotechnical Abstracts' (Geotext Services), 'Geotitles' (GEOSYSTEMS), 'Indian Society of Earthquake Technology', 'International Petroleum Abstracts', 'INSPEC', 'Int. Bib. of Periodical Literature', 'Mechanics', 'Newsletter of Eng. Analysis Software', 'Research Alert Institute for Scientific Information' (ISI), 'Science Citation Index' (ISI), and 'SCISEARCH Database' (ISI), 'Wilson Applied Science and Technology Abstracts'.

An Iterative Solution Method for Dynamic Response of Bridge-vehicles Systems: F. Yang and G. A. Fonder	195
CONFERENCE DIARY	217
Land Name and Park	
Issue No. 3, MARCH	
On Eccentric Seismic Pounding of Symmetric Buildings: E. Leibovich, A. Rutenberg and D. Z. Yankelevsky	219
The Theory of Response Analysis of Fuzzy Stochastic Dynamical Systems with a Single Degree of Freedom: Y. Zhang, G. Wang, F. Su and Z. Qiao	23
Response of Impact Dampers with Granular Materials under Random Excitation: A. Papalou and S. F. Masri	25
Application of Off-line and On-line Identification Techniques to Building Seismic Response Data: CH. Loh and HM. Lin	26
Disturbance Rejection Control of Bridge Response to Earthquake Excitation: M. S. Fadali, K. El-Zayyat and E. Maragakis	29
Critical Cross Power Spectral Density Functions and the Highest Response of Multi- supported Structures Subjected to Multi-component Earthquake Excitations: A. Sarkar and C. S. Manohar	30
CONFERENCE DIARY	31
Issue No. 4, APRIL	
Estimation of Site Amplification from Dahan Downhole Recordings: HC. Huang and HC. Chiu	31
Evaluation of Some Implicit Time-stepping Algorithms for Pseudodynamic Tests: O. S. Bursi and PS. B. Shing	33
Three-dimensional Dynamic Response of Lined Tunnels due to Incident Seismic Waves: I. D. Moore and F. Guan	35
Prediction of Horizontal Response Spectra in Europe: N. N. Ambraseys, K. A. Simpson and J. J. Bommer	37
Prediction of Vertical Response Spectra in Europe: N. N. Ambraseys and K. A. Simpson	40
SHORT COMMUNICATIONS Discussion on the Paper 'CQC and SRSS Methods for Non-classically Damped Structures' by R. Sinha and T. Igusa: R. Villaverde	41
Response to Discussion: T. Igusa	41
CONFERENCE DIARY	41

Issue No. 5, MAY

ANNOUNCEMENT	419
A Note on Damage-based Inelastic Spectra: B. Basu and V. K. Gupta	421
Effect of Modelling Assumptions and Input Motion Characteristics on Seismic Design Parameters of RC Bridge Piers: A. S. Elnashai and D. C. McClure	435
Seismic Ground Motion Synthetics of the 1989 Loma Prieta Earthquake: R. Zhang and G. Deodatis	465
Energy Input and Dissipation Behaviour of Structures with Hysteretic Dampers: M. Nakashima, K. Saburi and B. Tsuji	483
Efficient Iterative ARMA Approximation of Multivariate Random Processes for Structural Dynamics Applications: P. D. Spanos and B. A. Zeldin	497
Dynamic Cross-interaction Between Flexible Surface Footings by Combined BEM and FEM: J. Qian, L. G. Tham and Y. K. Cheung	509
CONFERENCE DIARY	527

Issue No. 6, JUNE

ANNOUNCEMENT	i
Time-domain Analysis of Linear Hysteretic Damping: J. A. Inaudi and N. Makris	52
Time-delay Effect and Its Solution for Optimal Output Feedback Control of Structures: C. C. Lin, J. F. Sheu, S. Y. Chu and L. L. Chung	54
Effect of Slab Flexibility on Interaction Between Two Circular Foundations: GS. Liou	56
Active Tendon Control of Cable-stayed Bridges: Y. Achkire and A. Preumont	58
Characteristics of Torsional Ground Motions: H. Hao	59
Equivalent Linearization of Generally Pinching Hysteretic, Degrading Systems: G. C. Foliente, M. P. Singh and M. N. Noori	61
Linear Quadratic Regulator for Structure under On-line Predicted Future Seismic Excitation: K. Yamada and T. Kobori	63
BOOK REVIEW	64
BOOKS RECEIVED	64
CONFERENCE DIARY	64

Issue No. 7, JULY

EDITORIAL	651
Large Amplitude Liquid Sloshing in Seismically Excited Tanks: W. Chen, M. A. Haroun and F. Liu	653
Beam Global Model for the Seismic Analysis of RC Frames: D. Miramontes, O. Merabet and J. M. Reynouard	671
The Formation of Viscous Damping Matrices for the Dynamic Analysis of MDOF Systems: A. Feriani and F. Perotti	689
Fibre Beam-column Model for Non-linear Analysis of R/C Frames: Part I. Formulation: E. Spacone, F. C. Filippou and F. F. Taucer	711
Fibre Beam-column Model for Non-linear Analysis of R/C Frames: Part II. Applications: E. Spacone, F. C. Filippou and F. F. Taucer	727
Semi-active Tuned Mass Dampers for Seismic Protection of Civil Structures: M. Abé	743
CONFERENCE DIARY	751
Issue No. 8, AUGUST	
ANNOUNCEMENT	ii
Effect of Infills on the Global Behaviour of R/C Frames: Energy Considerations from Pseudodynamic Tests: P. Negro and G. Verzeletti	753
Dynamic Response Variability of Structures with Uncertain Properties: L.S. Katafygiotis and C. Papadimitriou	775
Influence of Seismic Waves Spatial Variability on Bridges: A Sensitivity Analysis: M. Kahan, RJ. Gibert and PY. Bard	795
A Simplified Method for Prediction of Kinematic Soil-foundation Interaction Effects on Peak Horizontal Acceleration of a Rigid Foundation: S. K. Sarma and M. Srbulov	815
Number of Modes for the Seismic Design of Buildings: O. A. López and M. Cruz	837
On the Characteristics of Non-linear Soil Response and Dynamic Soil Properties using Vertical Array Data in Japan: M. R. Ghayamghamian and H. Kawakami	857
Uncoupled Frequency Ratio in Asymmetric Buildings: S. Annigeri, A. K. Mittal and A. K. Jain	871
BOOK REVIEW	883
CONFERENCE DIARY	885

VOLUME CONTENTS

vii

Issue No. 9, SEPTEMBER

ANNOUNCEMENT	ii
Aseismic Construction and Design Method for Multi-storey Composite Structures: H. Dai, X. D. Xia and D. J. Ding	887
Integral Representations and Regularizations for a Divergent Series Solution of a Beam Subjected to Support Motions: J. T. Chen, HK. Hong, C. S. Yeh and S. W. Chyuan	909
Convex Model for Seismic Design of Structures—I: Analysis: C. P. Pantelides and SR. Tzan	927
Convex Model for Seismic Design of Structures—II: Design of Conventional and Active Structures: SR. Tzan and C. P. Pantelides	945
Building Ductility Demand: Interplate Versus Intraplate Earthquakes: N. Lam, J. Wilson and G. Hutchinson	965
A Rate-dependent Isotropic Damage Model for the Seismic Analysis of Concrete Dams: M. Cervera, J. Oliver and O. Manzoli	987
Propagation of Normal Modes due to Impulsive Loading to 3-D Medium on a Rigid Basement: T. Touhei Discussion by E. Kausel	1011
Author's Reply	1015
CONFERENCE DIARY	1017
Issue No. 10, OCTOBER	
ANNOUNCEMENT	ii
Control of Building Vibrations with Active/Passive Devices: P. B. Shing, M. E. Dixon, N. Kermiche, R. Su and D. M. Frangopol	1019
Seismic Performance of an Instrumented Ten-storey Reinforced Concrete Building: E. Miranda and V. V. Bertero	1041
Ordered Peak Statistics through Digital Simulation: B. Basu, V. K. Gupta and D. Kundu	1061
Sliding System Predicting Large Permanent Co-seismic Movements of Slopes: C. A. Stamatopoulos	1075
A Model to Estimate the Virgin and Ultimate Effective Stiffnesses from the Response of a Damaged Structure to a Single Earthquake: D. Benedetti and M. P. Limongelli	1095
Analytical and Field Evidence of the Damaging Effect of Vertical Earthquake Ground Motion: A. J. Papazoglou and A. S. Elnashai	1109
Slide Rotation of Rigid Bodies Subjected to a Horizontal Ground Motion: A. Scalia and M. A. Sumbatyan	1139

Earthquake Hazard Mapping in the Maghreb Countries: Algeria, Morocco, Tunisia: D. Benouar, G. L. Molas and F. Yamazaki	1151
Dynamic Response of a Multi-layered Poroelastic Medium: R. K. N. D. Rajapakse and T. Senjuntichai Discussion by E. Kausel	1165
Author's Reply	1169
ANNOUNCEMENT	1171
CONFERENCE DIARY	1172
Issue No. 11, NOVEMBER	
ANNOUNCEMENT	1175
Response of Earth Dams to P and SV Waves using Coupled FE-BE Formulation: H. Abouseeda and P. Dakoulas	1177
Time-harmonic Vibration of an Incompressible Linearly Non-homogeneous Half-space: G. Muravskii and V. Operstein	1195
Optimal Polynomial Control for Seismically Excited Non-linear and Hysteretic Structures: J. N. Yang, A. K. Agrawal and S. Chen	1211
Property Matrices Identification of Unbounded Medium from Unit-impulse Response Functions using Legendre Polynomials: Formulation: A. Paronesso and J. P. Wolf.	1231
Property Matrices Identification of Unbounded Medium from Unit-impulse Response Functions using Legendre Polynomials: Implementation and Examples: A. Paronesso and J. P. Wolf	1247
Stochastic Seismic Performance Evaluation of Tuned Liquid Column Dampers: A. Y. J. Won, J. A. Pires and M. A. Haroun	1259
The Seismic Response of Concentrically Braced Moment-resisting Steel Frames: L. Martinelli, M. G. Mulas and F. Perotti	1275
Seismic Response of Sliding Structures to Bidirectional Earthquake Excitation: R. S. Jangid	1301
Consistent Infinitesimal Finite-element Cell Method in Frequency Domain: J. P. Wolf and C. Song	1307
BOOKS RECEIVED	1329
ANNOUNCEMENT	1330
CONFERENCE DIARY	1331

Issue No. 12, DECEMBER

ANNOUNCEMENT	1333
A Markovian Approach to Ordered Peak Statistics: B. Basu, V. K. Gupta and D.Kundu	1335
On Linear-saturation (LS) Control of Buildings: J. Mongkol, B. K. Bhartia and Y. Fujino	1353
Seismic Impact Loading in Inelastic Tension-only Concentrically Braced Steel Frames: Myth or Reality: R. Tremblay and A. Filiatrault	1373
Scattering of SH Waves in Multilayered Media with Irregular Interfaces: G. Ding and M. Dravinski	1391
Sequential Stiffness Design for Seismic Drift Ranges of a Shear Building-pile-soil System: Tsuneyoshi Nakamura, I. Takewaki and Y. Asaoka	1405
To Radiate or Not to Radiate: J. P. Wolf and C. Song	1421
Dual-level Seismic Design: A Reliability-based Methodology: K. R. Collins, YK. Wen and D. A. Foutch	1433
ANNOUNCEMENT	1469
CONFERENCE DIARY	1471
AUTHOR INDEX	1473
KEY WORD INDEX	1475